REMARKS

In the Office Action dated July 8, 2003, claims 1-25 are pending. Claims 1, 10, and 17 are independent claims from which all other claims depend therefrom.

Applicant noticed a couple numerical errors in Figures 1 and 5A of the present application and as such Figures 1 and 5A are attached herewith with corresponding corrections. In Figure 1, the protective tube, described in paragraph [0043] of the specification, is now designated by numerical designator 66 instead of 64. Figure 1 and paragraph [0043] have been amended as such. In Figure 5A, the remote exit location is now correctly designated by the numerical designator 172 in stead of 170, as stated in paragraph [0054].

Claims 1, 3-4, 6, and 17-21 stand rejected under 35 U.S.C. 102(b) as being anticipated by Looney et al. (USPN 5,480,549).

Claims 1 and 17 are similar and will therefore be described together. Claim 1 recites a system for the remediation of a contaminated subterranean body of groundwater. The system includes a supply of concentrated oxygen. A control mechanism controls the release of oxygen from the supply of concentrated oxygen. Multiple injection conduits are in communication with the control mechanism and extend below the ground through an entry hole. The injection conduits extend in a non-vertical fashion as they extend below a surface of the groundwater. Multiple injection sites are formed adjacent an end of each of the injection conduits to release oxygen from the supply of concentrated oxygen into the groundwater. Claim 17 recites a method of performing the same. The method of claim 17 does not include the limitation of a supplying concentrated oxygen, but does further include the limitation of conveying oxygen from a supply of oxygen to a control mechanism.

The system and method, of claims 1 and 17, provide and control the release of oxygen such that an adequate supply of oxygen can be provided for

the natural and effective reduction of contamination of the groundwater. Multiple injection conduits are extended from a single entry hol , which increases ease and expense in installation and minimizes site disturbance. The injection conduits extend in a non-vertical fashion to increase the size of the influenced area and to increase the efficiency of the remediation process.

Looney discloses an apparatus for phosphate-accelerated bioremediation. The apparatus of Looney includes the supply of a carrier gas and a supply of a vapor nutrient. The carrier gas is used to merely supply the vapor nutrient to an injection site. The vapor nutrient is the active element used to breakdown and extract the contaminants. The carrier gas may be in the form of air, oxygen-enriched air, nitrogen, or an oxygen-nitrogen mixture. In other words, the carrier gas may include oxygen. The vapor nutrient is a volatile, substantially nontoxic, and nonflammable compound, such as liquid organic phosphates. The apparatus includes a supply pipe for the carrier gas and the vapor nutrient and an extraction pipe to remove gas from the contaminated area.

Looney does not supply concentrated oxygen or control the specific flow of oxygen to a contaminated site. Looney does not teach or suggest supplying an adequate amount of oxygen for the natural and effective destroying and reducing of the contamination of a groundwater. The supply of air is insufficient to adequately destroy or reduce the contamination of groundwater. That being the case, Looney, as stated, supplies a vapor nutient to reduce the contamination. Looney reduces contamination via a proper supply of a vapor nutrient, such as phosphorous, which is clearly not oxygen.

Looney also fails to teach or suggest the use of multiple injection conduits that extend from a signal entry hole. Looney discloses the use of a single supply pipe. Thus, Looney does not teach or suggest each and every element of claims 1 and 17, therefore Applicant submits that claims 1 and 17 are novel, nonobvious, and are in a condition for allowance.

Claims 8 and 10-16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims 2, 5, 8-9, 17, 21-22, and 25, namely Looney and Buehlman et al. (USPN 6,210,073 B1), and further in view of Norris et al. (4,849,360).

Claim 10 recites a method for the remediation of a contaminated subterranean body of groundwater to destroy or reduce the amount of contaminants therein. The method of claim 10 is similar to the method of claim 17. The method of claim 10, over the method of claim 17, further includes the limitations of determining a location for multiple injection sites, boring a first hole in the ground and having an entry point and an exit point located remotely from the entry point, and delivering substantially pure oxygen to the injection sites.

Buehlman discloses a fluid transfer apparatus. The transfer apparatus includes multiple vertical conduits, which each have respective entry holes that are located at an entry site. The fluid apparatus uses each of the vertical conduits to supply and extract fluids from a contaminated site.

Norris discloses an apparatus for confining and decontaminating soil. Note that Norris is directed towards the decontamination of soil and not to the decontamination of a groundwater. The apparatus of Norris includes a tank having a pair of inlet conduits and a pair of exhaust conduits. Each inlet conduit has a separate entry hole. Soil within the tank is decontaminated through multiple treatment courses by injection of air into the tank.

Buehlman and Norris, like Looney, do not teach or suggest boring a first hole in the ground and having an entry point and an exit point located remotely from the entry point. Buehlman does not teach or suggest an exit point. Norris discloses the use of inlet conduits, slotted conduits, and exhaust conduits, which are coupled together and reside within a tank. Norris does not teach or suggest the boring of an entry hole in the ground, for multiple injection conduits, to supply oxygen to a groundwater. Also, like Looney, both Buehlman and Norris do not teach or suggest the use of multiple non-

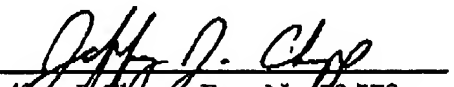
vertical injection conduits that have a common entry hole. The conduits of Buehlman are vertical and have different entry holes. The conduits of Norris have separate entry holes. Additionally, nowhere in Buehlman or Norris, like Looney, is the supply of substantially pure oxygen taught or suggested.

Thus, Looney, Buehlman, and Norris alone or in combination do not teach or suggest each and every element of claim 10, therefore Applicant submits that claim 10 is novel, nonobvious, and is in a condition for allowance. Applicant further submits that the objections and rejections with regards to claims 1, 10, and 17 have been overcome and since claims 2-9, 11-16, and 18-25 depend from claims 1, 10, and 17, respectively, they are also novel, nonobvious, and are in a condition for allowance for at least the same reasons.

In light of the amendments and remarks, Applicant submits that all objections and rejections are now overcome. The Applicant has added no new matter to the application by these amendments. The application is now in condition for allowance and expeditious notice thereof is earnestly solicited. Should the Examiner have any questions or comments, he is respectfully requested to call the undersigned attorney.

Respectfully submitted,

ARTZ & ARTZ P.C.



Jeffrey J. Chapp, Reg. No. 50,579
28333 Telegraph Road, Suite 250
Southfield, MI 48034
(248) 223-9500

Dated: November 5, 2003